

REMARKS

Claims 1-66 were pending in this application and claims 1, 8, 17, 30, 35, 42, 44, 48, and 56 were the independent claims under consideration. Claims 1-4, 6-10, 12-14, 16-19, 21, 30, 32-35, 37, 39, 41-42, 44-48, 51-58, and 60 are amended without any intention of disclaiming equivalents thereof; claim 31 is cancelled without prejudice and without any intention of abandoning the subject matter thereof; and claims 25-29 and 64-66 are withdrawn from consideration. Support for these amendments is found in the specification and in the originally filed claims and no new matter is added. Applicants acknowledge that claims 1-16, 33, 34, 37-41, 42, 43, 44-47, and 48-55 are deemed free from the prior art. After entry of this amendment, claims 1-30 and 32-66 are pending. In view of the amendments and remarks presented herein, reconsideration and allowance of the claims under consideration is respectfully requested.

Drawings

Applicants acknowledge the requirement that the nucleotide sequences of Figure 9C be identified by sequence identifiers. Accordingly, Applicants amend the paragraph beginning on page 9, line 26 (i.e., the brief description of the drawings) to include these identifiers for Figure 9C.

Additionally, Applicants enclose a marked up drawing of Figure 3 entitled “Annotated Sheet Showing Changes” which shows the second electrode “202”. Support for this amendment is found in the specification, for example, on page 12, lines 14-16. Also, Applicants respectfully note that Figure 3 indicates the migration channel 96 that extends between the electrode channels. The migration channel 96 between the two electrodes also is seen in the perspective view of Figure 1.

As formal drawings were not required, Applicants do not submit them herewith.

Rejection under 35 U.S.C. § 112, Second Paragraph

Claims 1-16, 33, 34, 37-41, 42, 43, 44-47, and 48-55 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Method claim 37 has been amended to depend from method claim 35. Claims 1, 8, 33, 37, 42, 44, and 48 (and claims 2, 34, and 51) have been amended to replace the word “bounded” with the phrase “adjacent to.” Claims 6, 14, and 55 have been amended to replace the phrase “certain manner” with the phrase “selected orientation.”

In view of the foregoing, Applicants respectfully request that the rejections under 35 U.S.C. § 112, second paragraph, be reconsidered and withdrawn.

Rejection under 35 U.S.C. § 102(e)

Claims 30, 31 and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,156,179 to Binder *et al.* (“Binder”). Claim 30 has been amended to recite the non-conductive polymeric material of claim 31, and claim 31 has been cancelled without prejudice.

Binder reports a method of covalently attaching specific binding proteins to a solid support, like a gel, a bead or a microparticle. Amended independent claims 30 and 35 recite a non-conductive polymeric material for supporting a gel matrix and a ligand. Binder does not teach a non-conductive polymeric material that supports both the gel matrix and the ligand.

Accordingly, Applicants, for the reasons provided above, respectfully submit that Binder fails to teach each element of amended claims 30 and 35 and that they are allowable. Applicants respectfully request that the rejection be reconsidered and withdrawn.

Rejection under 35 U.S.C. § 103(a)

Claims 32 and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Binder in view of U.S. Patent No. 5,274,240 to Mathies *et al.* (“Mathies”). Applicants respectfully submit that neither of these references, either alone or in combination, teach or

suggest a non-conductive polymeric material for supporting a gel matrix and a ligand as recited in amended independent claims 30 and 35.

As mentioned above, Binder reports on a method of covalently attaching specific binding proteins to a solid support, like a gel, a bead or a microparticle. Mathies reports on increasing throughput in capillary electrophoresis by employing a large number of capillaries in parallel. Mathies does not provide that which Binder lacks, namely a non-conductive polymeric material for supporting a gel matrix and a ligand.

Accordingly, Applicants respectfully submit that Mathies and Binder, either alone or in combination, fail to teach or suggest the use of a non-conductive polymeric material for supporting a gel matrix and capture ligand. Accordingly, Applicants respectfully submit that amended independent claims 30 and 35 are allowable over Binder and Mathies and that claims 32 and 36, which depend from claims 30 and 35, are allowable as depending from an allowable base claim. Therefore, reconsideration and withdrawal of this rejection is respectfully requested.

CONCLUSION

In the view of the foregoing amendments and remarks, Applicants respectfully submit that claims 1-24, 30, and 32-63 are in condition for allowance and request early and favorable action.

Respectfully submitted,



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